

# DEPARTMENT OF TRANSPORTATION

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TO:

All Users of the Delaware Manual on Uniform Traffic Control Devices

FROM:

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Chief of Traffic Engineering

**DATE:** 

October 21, 2022

**SUBJECT:** 

"Clankers" – Overhead Physical Deterrent for Overheight Vehicles

Section 1A.07 of the Delaware Manual on Uniform Traffic Control Devices (DE MUTCD Revision 3) states:

# Option:

01A (DE Revision) With approval of the Delaware Department of Transportation Chief Engineer, traffic control devices and applications that do not comply with one or more standard statements in this manual may be used, if it has been determined based on engineering judgment that such devices/applications follow the basic precepts of traffic control devices (incorporating design elements that promote the ability of the road user to perceive, comprehend, and react as intended) and are determined to be in the best interests of Delaware's road users.

Accordingly, DelDOT is providing the following Option, Guidance, Standard and Support statements regarding Clankers:

# Option:

01 Clankers may be used along Delaware roadways in conjunction with a dynamic warning system set at the low-clearance bridge/tunnel height, for overheight vehicles to detect visually and then strike with relatively "safe" results – e.g., minimal overheight vehicle/load damage and reduced likelihood of flying projectiles injuring nearby pedestrians, bicyclists, residential properties, public infrastructure, etc.

## Guidance:

02 Clanker assemblies should be considered where prior enhanced warning efforts have been unsuccessful to deter bridge/tunnel strikes based on reported crash data, and engineering studies and observations should continue post-implementation to measure clanker assembly effectiveness.



All Users of the Delaware Manual on Uniform Traffic Control Devices Page 2 of 2 October 21, 2022

#### Standard:

03 The design and location of overhead clanker devices and sign assemblies on DelDOT-maintained roadways shall be approved by DelDOT Traffic Engineering prior to installation within the right-of-way.

## Standard:

04 Clankers shall be lightweight, hollow spherical or cylindrical red or orange-colored devices which hang down from a mast arm, spaced two feet apart on-center, spanning across the entire lane of travel while overhanging into the adjacent shoulder and/or median approaching the obstruction. White retroreflective tape shall be wrapped equatorially around each clanker device to provide enhanced nighttime conspicuity. All clankers installed on one mast arm shall be identical in appearance.

## **Standard:**

05 When installed, clankers shall be part of a dynamic warning system that includes overhead warning signage with flashing red beacons activated by an upstream overheight vehicle detection device.

#### Guidance:

06 When installed, clanker assemblies should be upstream of locations where an engineering study identifies a significant number of reported crashes with bridges or other overhead structures. Positioning of the clanker assemblies should be determined based on diversion or turnout routes to minimize unintended or nuisance clanker strikes.

10/24/202

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